

CLAIMS

1. A method of manufacturing a honeycomb structure comprising the steps of:

making a clay by mixing and kneading a silicon carbide powder raw material, a metal silicon raw material, an organic binder, and a raw material containing alkaline earth metal;

forming the clay to form a formed body; and

pre-firing and firing the formed body,

wherein the firing is performed in a protective container made of silicon carbide in which a solid containing aluminum is placed.

2. The method of manufacturing a honeycomb structure according to claim 1,

wherein the solid has a total weight ratio of aluminum in the solid placed in the protective container equal to or above 0.01 relative to a total weight of a fired material.

3. The method of manufacturing a honeycomb structure according to any of claims 1 and 2,

wherein the solid contains aluminum equal to or above 1% in terms of a weight composition ratio in oxide equivalent.

4. The method of manufacturing a honeycomb structure according to any one of claims 1 to 3,

wherein the solid is a particulate body.

5. The method of manufacturing a honeycomb structure according to claim 4,

wherein the particulate body has a grain size in a range from 0.01 to 1 mm.

6. The method of manufacturing a honeycomb structure according to any one of claims 1 to 3,

wherein the solid is a block body.

7. The method of manufacturing a honeycomb structure according to claim 6,

wherein the block body has water absorption equal to or above 0.05% by weight.

8. The method of manufacturing a honeycomb structure according to any one of claims 1 to 7,

wherein the solid is placed such that a separation distance from a body to be fired is equal to or below 50 cm.